Virginia sneezeweed

Helenium virginicum

Guidelines for Landowners Using Conservation Practices

Missouri Department of Conservation

Common name • Virginia sneezeweed Scientific name • Helenium virginicum State status • Endangered Federal status • Threatened

Ecology

Limited habitat in two Virginia counties and five southern Missouri counties make up this species' entire global range. There are currently about 25 occurrences of the species in Virginia and 40 in Missouri. Preferred habitat includes shorelines and plains around sinkhole ponds, low lying fields and wet meadows. Several populations in Missouri are located on lands owned by the Missouri Department of Conservation and are protected. Five populations in Virginia are protected. The sneezeweed is a herbaceous perennial that, when mature, ranges from 1 to 5.5 feet in height. The basal leaves may be broad in the middle tapering towards the ends, but others may appear oblong. Stem leaves are lance-shaped and become progressively smaller as they go up the stem. The stems are "winged," the wings being continuous with the bases of the stem leaves. The flower ray petals are yellow and wedge shaped with three lobes at the ends. The central disk is vellow and ball-shaped. Flowering time is from July to late-September. Peak flowering occurs in late-July to early-August. Primary insect pollinators are believed to be bees, wasps, butterflies and hoverflies.

Reasons for Decline

Existing populations are primarily threatened by human-induced disruptions of hydrologic regimes, particularly by encroaching agriculture and residential land development. Exotic organisms may also pose threats to sneezeweed populations in the near future.

Recommendations

The key to survival of this species is the protection of habitat and maintenance of natural hydrologic regimes. Monitor all populations and study disturbed sites to determine long-term viability of populations.

Promote land management activities that restore sinkhole ponds and other wetland or karst communities. Areas adjacent to existing Virginia sneezeweed sites should be managed in such a way as to prevent the introduction of nonnative species or possible degradation of the native plant community.

A survey of the project area should be conducted by a trained biologist in order to identify occurring populations of this species.

Refer to Management Recommendations for Construction Projects Affecting Missouri Karst Habitat and Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers.

Consider the balance between adverse and beneficial practices when determining the overall effect of a conservation practice.



Photo Credit: Missouri Department of Conservation

Beneficial Practices

- Restoring natural hydrologic regime of sinkholes, wet meadows and low lying fields.
- The wetland areas where Virginia sneezeweed is found need to be protected from conversion or degradation by development or agriculture.

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- Excluding livestock from areas where Virginia sneezeweed is found.
- Controlling invasive plants in areas with Virginia sneezeweed populations. To minimize harm to this species use a selective herbicide, a spot application, or well timed application with a nonselective herbicide when this plant is dormant.
- Control of woody vegetation in areas with Virginia sneezeweed.

Adverse Practices

- Degradation or destruction of sinkholes, wet meadows and low fields where Virginia sneezeweed occurs.
- Mowing or burning of Virginia sneezeweed populations during the July through September growing period.
- Changing the hydrology of area where Virginia sneezeweed are found by:
 - Diverting, altering, or collecting the flow through ditching, underground tile or "spring developments."
 - Impounding the habitat or inundating it with a dam or other structure.
 - Dredging or deepening of the habitat to create a pool or pond.
- Heavy foot traffic, vehicle traffic, or use of heavy machinery in areas with Virginia sneezeweed populations.
- Conducting earthmoving practices or causing erosion that destroys or degrades communities with this species.
- Establishing invasive vegetation, such as tall fescue, sericea lespedeza, reed canary grass on sites or nearby where it could spread into the native plant community, and thus degrade or destroy habitat for this species.
- Applying a nonselective or broadleaf herbicide in areas where this species is located and actively growing.
- Unmanaged application of pesticides, animal waste or fertilizers that destroys or degrades sites with Virginia sneezeweed populations.
- Uncontrolled livestock access that destroys or degrades habitat structure.
- Disking in known habitats.

Information Contacts

Missouri Department of Conservation Policy Coordination Section P.O. Box 180 2901 W. Truman Blvd Jefferson City, MO 65102-0180 Telephone: 573-751-4115

http://www.mdc.mo.gov/nathis/endangered/

U.S. Fish and Wildlife Service Ecological Services Field Office 101 Park DeVille Dr., Suite A Columbia, MO 65203 Telephone: 573-234-2132

http://www.fws.gov/midwest/partners/missouri.html

Legal

The Missouri Department of Conservation prepared these guidelines for conservation practices with assistance from other state agencies, contractors, and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat.

Compliance with these management guidelines is not required by the Missouri wildlife and forestry law or by any regulation of the Missouri Conservation Commission. Other federal, state or local laws may affect construction practices.

"State Endangered Status" is determined by the Missouri Conservation Commission under constitutional authority, and specific requirements for impacts to such species are expressed in the Missouri Wildlife Code, rule 3 CSR 10-4.111.

Species listed under the Federal Endangered Species Act must be considered in projects receiving federal funds or requiring permits under the Clean Water Act, with compliance issues resolved in consultation with the U.S. Fish and Wildlife Service.

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